- 1-2. (cancelled).
- 3. (previously presented): A process according to claim 8 wherein the metallocenyl-phthalocyanine compound is represented by formula

$$(Me_{2}CH)_{2}C(H)O \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad Pd \qquad N \qquad OCH(CHMe_{2})_{2}$$

$$(Me_{2}CH)_{2}C(H)O \qquad OCH(CHMe_{2})_{2}$$

where x = 2.6 to 3.0.

4. (previously presented): A process according to claim 8 wherein the metallocenyl-phthalocyanine compound is represented by formula

$$(Me_{2}CH)_{2}C(H)O \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad N \qquad N \qquad OCH(CHMe_{2})_{2}$$

$$(Me_{2}CH)_{2}C(H)O \qquad OCH(CHMe_{2})_{2}$$

where x = 0 to 0.5.

5-7. (cancelled).

- 8. (currently amended): A process for the manufacture of an optical recording medium having at least one recording layer, comprising the steps of
 - a) incorporating a metallocenyl-phthalocyanine represented by formula I

wherein

M₁ is a divalent metal, an oxometal group, halogenometal group or hydroxymetal group, or two hydrogen atoms,

X is halogen

 Y_1 is $-OR_1$, $-OOC-R_2$, $-NHR_1$, $-N(R_1)R_2$,

 $\underline{Y_2}$ is -SR₁,

R₃ is

$$\nearrow$$
 R_6 M_2 R_7

 R_6 and R_7 are each independently of the other hydrogen, halogen, C_1 - C_4 alkyl, C_1 - C_4 alkyl, diarylphosphine, or phosphorus-containing C_1 - C_4 alkyl, diarylphosphine, diarylpho

x may be a rational number from 0 to 8 y_1 and y_2 may be each independently of the other a rational number from 0 to 6 z may be a number from 1 to 4, wherein $(x + y_1 + y_2 + z)$ is ≤ 16 .

and wherein R₁ and R₂ may be each independently of the other

 $\underline{C_{1}}$ - $\underline{C_{20}}$ alkyl which is unsubstituted or substituted by halogen, hydroxy, $\underline{C_{1}}$ - $\underline{C_{20}}$ alkoxy, $\underline{C_{1}}$ - $\underline{C_{20}}$ alkylamino or $\underline{C_{2}}$ - $\underline{C_{20}}$ dialkylamino and which may be interrupted by $\underline{-O_{-}}$, $\underline{-S_{-}}$, $\underline{-NH_{-}}$ or $\underline{-NR_{10}}$ -, wherein $\underline{R_{10}}$ may be $\underline{C_{1}}$ - $\underline{C_{6}}$ alkyl,

C₅-C₂₀cycloalkyl, C₂-C₂₀alkenyl, C₅-C₁₂cycloalkenyl, C₂-C₂₀alkynyl, C₆-C₁₈aryl or C₇-C₁₈aralkyl, and wherein one or two ligands may optionally be bound to the divalent metal atom, the oxometal group, halogenometal group or hydroxymetal group, or its metal complex of a divalent metal, exometal, halogenometal or hydroxymetal, in which at least one of the four phonyl rings of the phthalocyanines contains, bound via a bridge unit E, at least one metallocene radical as a substituent, and E is being-composed of a chain of at least two members selected from the group consisting of -CH₂-, -C(=O)-, -CH(C₁-C₄alkyl)-, -C(C₁-C₄alkyl)₂-, -NH-, -S-, -O- and -CH=CH- into said recording layer,

wherein the substrate is a homo- or copolymeric plastic.

9. (currently amended): An optical recording medium, which comprises a metallocenyl-phthalocyanine represented by formula I

wherein

M₁ is a divalent metal, an oxometal group, halogenometal group or hydroxymetal group, or two hydrogen atoms,

X is halogen

 Y_1 is $-OR_1$, $-OOC-R_2$, $-NHR_1$, $-N(R_1)R_2$,

 Y_2 is $-SR_1$

R₃ is

$$R_6$$
 M_2 R_7

 R_6 and R_7 are each independently of the other hydrogen, halogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, amino- C_1 - C_4 alkyl, diarylphosphine, or phosphorus-containing C_1 - C_4 alkyl,

may be a rational number from 0 to 8 y_1 and y_2 may be each independently of the other a rational number from 0 to 6 z may be a number from 1 to 4,

wherein $(x + y_1 + y_2 + z)$ is ≤ 16 ,

and wherein R₁ and R₂ may be each independently of the other

 $\underline{C_1}$ - $\underline{C_{20}}$ alkyl which is unsubstituted or substituted by halogen, hydroxy, $\underline{C_1}$ - $\underline{C_{20}}$ alkoxy, $\underline{C_1}$ - $\underline{C_{20}}$ alkylamino or $\underline{C_2}$ - $\underline{C_{20}}$ dialkylamino and which may be interrupted by $\underline{-O}$ -, $\underline{-S}$ -, $\underline{-NH}$ - or $\underline{-NR_{10}}$ -, wherein $\underline{R_{10}}$ may be $\underline{C_1}$ - $\underline{C_6}$ alkyl,

C₅-C₂₀cycloalkyl, C₂-C₂₀alkenyl, C₅-C₁₂cycloalkenyl, C₂-C₂₀alkynyl, C₆-C₁₈aryl or C₇-C₁₈aralkyl, and wherein one or two ligands may optionally be bound to the divalent metal atom, the oxometal group, halogenometal group or hydroxymetal group, or its metal complex of a divalent metal, exemetal, halogenometal or hydroxymetal, in which at least one of the four phonyl rings of the phthalocyanine contains, bound via a bridge unit E, at least one metallocene radical as a substituent, and E is being-composed of a chain of at least two members selected from the group consisting of -CH₂-, -C(=O)-, -CH(C₁-C₄alkyl)-, -C(C₁-C₄alkyl)₂-, -NH-, -S-, -O- and -CH=CH-, and a substrate which is a homo- or copolymeric plastic.

10. (previously presented): An optical recording medium, which consists essentially of a transparent substrate, a recording layer on that substrate, a reflection layer on the recording layer and, if desired, a final protective layer, the recording layer comprising a metallocenyl-phthalocyanine <u>represented by formula I</u>

wherein

M₁ is a divalent metal, an oxometal group, halogenometal group or hydroxymetal group, or two hydrogen atoms,

X is halogen

 Y_1 is $-OR_1$, $-OOC-R_2$, $-NHR_1$, $-N(R_1)R_2$,

 Y_2 is -SR₁,

R₃ is

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 R_6 and R_7 are each independently of the other hydrogen, halogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, amino- C_1 - C_4 alkyl, diarylphosphine, or phosphorus-containing C_1 - C_4 alkyl,

x may be a rational number from 0 to 8 y_1 and y_2 may be each independently of the other a rational number from 0 to 6

z may be a number from 1 to 4,

wherein $(x + y_1 + y_2 + z)$ is ≤ 16 ,

and wherein R₁ and R₂ may be each independently of the other

 $\underline{C_1-C_{20}}$ alkyl which is unsubstituted or substituted by halogen, hydroxy, $\underline{C_1-C_{20}}$ alkoxy, $\underline{C_1-C_{20}}$ alkylamino or $\underline{C_2-C_{20}}$ dialkylamino and which may be interrupted by $\underline{-O_-}$, $\underline{-S_-}$, $\underline{-NH_-}$ or $\underline{-NR_{10}}$, wherein $\underline{R_{10}}$ may be $\underline{C_1-C_{6}}$ alkyl,

C₅-C₂₀cycloalkyl, C₂-C₂₀alkenyl, C₅-C₁₂cycloalkenyl, C₂-C₂₀alkynyl, C₆-C₁₈aryl or C₇-C₁₈aralkyl,

and wherein one or two ligands may optionally be bound to the divalent metal atom, the oxometal group, halogenometal group or hydroxymetal group, or its metal complex of a divalent metal, exemetal, halogenometal or hydroxymetal, in which at least one of the four phenyl rings of the phthalocyanines contains, bound via a bridge unit E, at least one metallocene radical as substituent, and E is being-composed of a chain of at least two members selected from the group consisting of -CH₂-, -C(=O)-, -CH(C₁-C₄alkyl)-, -C(C₁-C₄alkyl)₂-, -NH-, -S-, -O- and -CH=CH-.

- 11. (previously presented): A process according to claim 8 wherein the optical recording medium is a DVD, a diffractive-optical element or medium for recording a hologram.
- 12. (previously presented): A process for the manufacture of an optical recording medium having at least one recording layer, comprising the steps of
 - a) incorporating a mixture, which comprises
- (a) 60 to 95 mol % of a compound II

containing one radical R_3 (z = 1),

- (b) 5 to 20 mol % of a compound II containing two radicals R_3 (z=2), and
- (c) 0 to 25 mol % of a compound IV

wherein $-OR_{11}$, $R_3 = R_{14}$, X and M_3 each have the same meaning in formulae II and IV and are as defined in claim 2, the mol-% amounts making up 100%, into said recording layer.

- 13. (currently amended): A process according to claim 12 2-wherein the optical recording medium is a DVD, a diffractive-optical element or medium for recording a hologram.
- 14. (previously presented): A process for the manufacture of optical recording medium having at least one recording layer, comprising the steps of
- a) incorporating a mixture, which comprises
- (a) 60 to 95 mol % of a compound II

containing one radical R_3 (z = 1),

wherein R_{11} is C_1 - C_{12} alkyl and M_3 is palladium or copper, and z is 1,

- (b) 5 to 20 mol % of a compound II containing two R_3 (z = 2), and
- (c) 0 to 25 mol % of a compound IV

wherein R_{14} may be -CHO, -CH₂OH, -COOH, -CH₂OC(O)-C₁-C₄alkyl or an acetal, and z may be 1 or 2,

wherein -OR₁₁, $R_3 = R_{14}$, X and M_3 each have the same meanings in formulae II and IV and are as defined for claim 2, the mol-% amounts making up 100%, into said recording layer.

- 15. (previously presented): A process according to claim 14 wherein the optical recording medium is a DVD, a diffractive-optical element or medium for recording a hologram.
- 16. (cancelled).
- 17. (previously presented): An optical recording medium according to claim 9 wherein the metallocenyl-phthalocyanine compound is represented by formula

$$(Me_{2}CH)_{2}C(H)O \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad Pd \qquad N \qquad OCH(CHMe_{2})_{2}$$

$$(Me_{2}CH)_{2}C(H)O \qquad OCH(CHMe_{2})_{2}$$

where x = 2.6 to 3.0.

- 18. (previously presented): An optical recording medium according to claim 17 wherein the optical recording medium is a DVD, a diffractive-optical element or medium for recording a hologram.
- 19. (previously presented): An optical recording medium according to claim 9 wherein the metallocenyl-phthalocyanine compound is represented by formula

$$(Me_{2}CH)_{2}C(H)O \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad N \qquad N \qquad OCH(CHMe_{2})_{2}$$

$$(Me_{2}CH)_{2}C(H)O \qquad OCH(CHMe_{2})_{2}$$

where x = 0 to 0.5.

- 20. (cancelled).
- 21. (currently amended): An optical recording medium according to claim 10 wherein the metallocenyl-phthalocyanine compound is represented by formula

$$(Me_{2}CH)_{2}C(H)O \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad Pd \qquad N \qquad OCH(CHMe_{2})_{2}$$

$$(Me_{2}CH)_{2}C(H)O \qquad OCH(CHMe_{2})_{2}$$

where x = 2.6 to 3.0.

22. (previously presented): An optical recording medium according to claim 10 wherein the metallocenyl-phthalocyanine compound is represented by formula

$$(Me_{2}CH)_{2}C(H)O \qquad N \qquad N \qquad CH_{2}OC(=O)$$

$$N \qquad N \qquad N \qquad OCH(CHMe_{2})_{2}$$

$$(Me_{2}CH)_{2}C(H)O \qquad OCH(CHMe_{2})_{2}$$

where x = 0 to 0.5.

23. (previously presented): An optical recording medium according to claim 22 wherein the optical recording medium is a DVD, a diffractive-optical element or medium for recording a hologram.